

REMARKS

The Office Action of July 10, 2008 has been carefully reviewed and this paper is responsive thereto. Claims 11-30 are pending. Claims 11-30 stand rejected.

Claim Rejections Under 35 USC §101

Claims 24-30 are rejected under 35 USC §101 because the claimed invention is directed to non-statutory subject matter. In particular, the Office Actions states:

Claim 24 includes a module comprising a controller, a control processing unit, a preregistered TCP port, and an optimal communication stack, all of which may be implemented in software. As such, the module may be a software module (i.e. computer program).

(Office Action, Page 2).

Applicants respectfully submit that claim 24 is an appropriate device claim in which structural features such as “a controller” and a “control processing unit” have been claimed. Such features are supported by the specification and are not part of a computer program. Therefore, for at least this reason, Applicants respectfully submit that the 35 USC §101 is not proper and request that the rejection be reconsidered.

Claim Rejections Under 35 USC §103

Claims, 11, 13-19, 21-24 and 27-30 are rejected under 35 USC §103(a) as being unpatentable over Venkatraman, et al., U.S. Paten No. 5,956,487 (“Venkatraman”) in view of Brenners, et al., RFC 1945, Hypertext Transfer Protocol (“Brenners”). Applicants respectfully traverse the rejections.

Independent claim 11 includes the claimed feature of “an input/output slave device being exclusively responsive to the request message of the master device.” The Office Action attempts to equate the claimed “master device” to a computer system 91 shown in Figure 4 of Venkatraman, and the claimed “input/output slave device” with a device 10 shown in Venkatraman. However, the Office Action and the cited portion of Venkatraman (Col. 2, lines 15-25) do not disclose the claimed feature of “an input/output slave device being exclusively

responsive to the request message of the master device.” (Emphasis Added). Applicants respectfully submit that Applicants claimed “slave device” is exclusively responsive to a master device. However, in stark contrast, the Venkatraman device 10 is responsive to messages from numerous devices. For example, Venkatraman in discussing Figure 4 states:

Any one or more of a set of computer systems 90-92 coupled to the large organization network 80 may access the device web pages of the devices 10 and 50-52. The computer systems 90-92 may execute one or more of a variety of available web browser software or may have a web browser function built in.

(Col. 7, lines 23-29).

As such, the devices 10 of Venkatraman will respond to many masters. This is problematic for many reasons as the Venkatraman devices may not be used in industrial automation environments where security is an important consideration. Furthermore, this is different from being exclusively responsive, as the present claim requires. In addition, Brenners does not make up for this deficiency in Venkatraman. Therefore, for at least this reason Applicants respectfully submit that independent claim 11 is allowable over the combination of Venkatraman and Brenners. Dependent claims 12-23 which ultimately depend from independent claim 11 are allowable for at least the same reason as independent claim 11.

Moreover, independent claim 11 is allowable over Venkatraman and Brenners for at least an additional reason. Independent claim 11 includes the claimed feature of “an adapter device directly attached to a body of the slave device . . . the adapter device configured to directly attach to an in-data port and an out-data port of the body of the slave device.” (Emphasis Added). Support for Applicants claimed feature may be found in at least Figure 1 which illustrates the COM-adapter 10 directly attached to the body of the I/O device body 2.

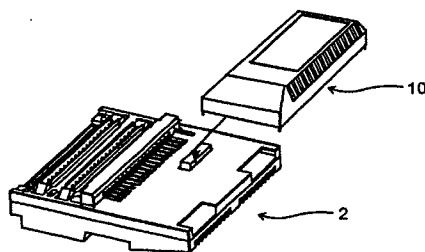


Fig. 1

In addition, Applicants' specification states:

Specifically, the communication adapter is configured to directly attach to and communicate through at least an in-data port, the out-data port, and the identification port of the input/output body.

(Specification Page 4, lines 1-3)

As explained in Applicants' specification, this allows for quickly and easily connecting the input/output device to the network without-requiring special couplers or other devices to be implemented in the network. As explained in the application,

the invention allows inexpensive standard network components to be used in place of specialized real time field bus components in communicating with industrial sensor and actuator devices. This enables major savings in cost and complexity when connecting simple devices to a network solution involving programmable controllers or other industrial computer systems, since the same networking infrastructure components can be shared.

(Specification Page 4, lines 2-25).

The Office Action is attempting to equate the claimed "master device" with the computer systems (90-92) of Venkatraman, the claimed "slave device" with device 10 of Venkatraman, and the claimed "adapter device" with the embedded network interface 12 of Venkatraman. However, the network interface 12 of Venkatraman is not directly attached to a body of device 10. Applicants have reviewed the cited section of Venkatraman (Col. 2, lines 15-20) and respectfully submit that the cited section does not disclose the claimed feature of an adapter

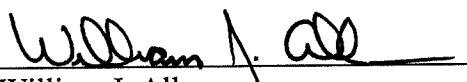
device directly attached to a body of a slave device. In addition, Brenners does not make up for the deficiencies in Venkatraman. Therefore, Applicants respectfully submit that independent claim 11 is allowable for at least this additional reason.

Independent claim 24 includes the claimed feature of "a control processing unit operably coupled to the Ethernet controller and directly attached to a factory automation device." (Emphasis added). Applicants respectfully submit that for the same reasons as discussed above with respect to independent claim 11, independent claim 24 is allowable over Venkatraman and Brenners. Dependent claims 25-30 which ultimately depend from independent claim 24 are allowable for at least the same reason as independent claim 24.

Claims 12, 20 and 25-26 are rejected under 35 USC §103(a) as being unpatentable over Venkatraman and Brenners as applied to claims 11 and 24 above, and further in view of Salas, et al., U.S. 5,862,391 ("Salas"). Applicants respectfully traverse the rejections.

Dependent claims 12, 20 and 25-26 are allowable for at least the same reasons as the independent claim from which they ultimately depend. Applicants respectfully requests reconsideration of the pending claims and a finding of their allowability. A notice to this effect is respectfully requested. Please feel free to contact the undersigned should any questions arise with respect to this case that may be addressed by telephone.

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